

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEPRIORITY, DOCKET NO.
2710-4007US2SERIAL NO.
09/549,937

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

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April 14, 2000GROUP ART UNIT
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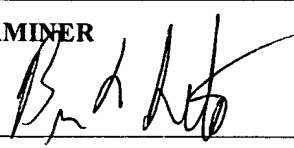
U.S. PATENT DOCUMENTS

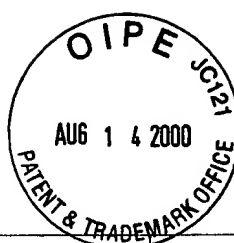
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|---------------------|---|--------------------|----------|------------------------------|-------|----------|-------------------------------|
| BW | 1 | 5,053,050 | 10/1/91 | Itay | 623 | 16 | |
| | 2 | 5,130,141 | 7/14/92 | Law et al. | 424 | 548 | |
| | 3 | 5,336,263 | 8/9/94 | Ersek et al. | 623 | 11 | |
| | 4 | 5,538,722 | 7/23/96 | Blau et al. | 424 | 93.21 | |
| | 5 | 5,858,351 | 1/12/99 | Podsakoff Podskoff et al. | 424 | 93.2 | |
| | 6 | 5,516,532 | 5/14/96 | Atala et al. | 424 | 548 | |
| | 7 | 5,667,778 | 9/16/97 | Atala | 424 | 93.7 | |
| BW | 8 | 5,833,978 | 10/10/98 | Tremblay | 424 | 093.7 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
|----|----|--------------------|---------|----------|--------|----------|-------------|----|
| | | | | | | | YES | NO |
| BW | 9 | WO 91/07992 | 6/13/91 | PCT WIPO | A61K37 | 02 | | |
| | 10 | WO 94/07999 | 4/14/94 | PCT | C12N11 | 10 | | |
| | 11 | WO 94/21299 | 9/29/94 | PCT | A61K47 | 38 | | |
| BW | 12 | WO 98/36055 | 20/8/98 | PCT WIPO | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

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| EXAMINER  | DATE CONSIDERED 4/1/02 |
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| INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) | | | | APPLICANT M.B. CHANCELLOR et al. | | | | |
| | | | | FILING DATE April 14, 2000 | | GROUP ART UNIT 1648 1635 | | |
| U.S. PATENT DOCUMENTS | | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | |
| BW | 13 | 5,594,032 | 11/14/97 14/1/97 | Gonzalez-Cadavid et al | 514 | 645 | | |
| | 14 | 4,965,353 | 10/23/90 23/10/90 | Della Valle et al. | 536 | 55.1 | | |
| | 15 | 4,424,208 | 1/3/84 3/1/84 | Wallace et al | 424 | 177 | | |
| | 16 | 5,858,390 | 1/12/99 12/1/99 | W.K. Boss, Jr. | 424 | 426 | | |
| BW | 17 | 5,876,447 | 2/2/99 2/3/99 | G.W. Arnett | 623 | 11 | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO | |
| BW | 18 | WO 96/18303 | 20/6/86 | PCT WIPO | | | | |
| PL | 19 | WO 99/47163 | 23/9/99 | PCT WIPO | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | | | |
| BW | 20 | TA Rando et al., 1994, "Primary mouse myoblast purification, characterization, and transplantation for cell-mediated gene therapy", Journal of Cell Biology, 125:1275-1287. | | | | | | |
| | 21 | Z. Qu et al., 1998, "Development of approaches to improve cell survival in myoblast transfer therapy", Journal of Cell Biology, 142:1257-1267. | | | | | | |
| | 22 | J. Huard et al., 1992, "Human myoblast transplantation: preliminary results of 4 cases", Muscle and Nerve, 15:550-560. | | | | | | |
| BW | 23 | CS Day et al., 1997, "Myoblast-mediated gene transfer to the joint", Journal of Orthopedic Research, 15:894-903. | | | | | | |
| EXAMINER | | | | DATE CONSIDERED 4/18/02 | | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | | |

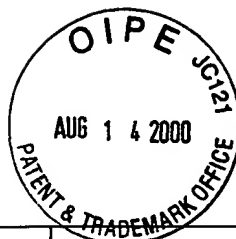


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| | | | | FILING DATE April 14, 2000 | | GROUP ART UNIT 1546 1625 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO |
| BW | 24 | WO 98/44142 | 8/10/98 10/8/98 8/10/98 | PCT-WIPO | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | | |
| | 25 | G. Bandara et al., 1993, "Inarticular expression of biologically active interleukin 1-receptor-antagonist protein by ex vivo gene transfer", Proc. Natl. Acad. Sci. USA, 90:10764-10768. | | | | | |
| BW | 26 | G. Acsadi et al., 1994, "A differential efficiency of adenovirus-mediated in vivo gene transfer into skeletal muscle cells of different maturity", Human Molecular Genetics, 3:579-584. | | | | | |
| | 27 | C. Kasemkijwattana et al., 1998, "Development of approaches to improve the healing following muscle contusion", Cell Transplantation, 7:585-598. | | | | | |
| | 28 | KP Spindler et al., 1995, "Regional mitotic response of the meniscus to platelet-derived growth factor (PDGF-AB)", Journal of Orthopedic Research, 13:201-207. | | | | | |
| | 29 | E. Gussoni et al., 1992, "Normal dystrophin transcripts detected in Duchenne muscular dystrophy patients after myoblast transplantation", Nature, 356:435-438. | | | | | |
| | 30 | G. Karpati et al., 1993, "Myoblast transfer in Duchenne Muscular Dystrophy", Annals of Neurology, 34:8-17. | | | | | |
| BW | 31 | J.P. Tremblay et al., 1993, "Results of a triple blind clinical study of myoblast transplantations without immunosuppressive treatment in young boys with Duchenne muscular dystrophy", Cell Transplantation, 2:99-112. | | | | | |
| EXAMINER Bm d Htm | | | | DATE CONSIDERED 4/18/02 | | | |

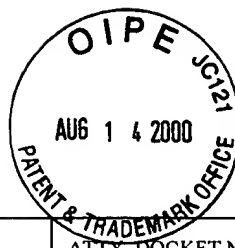
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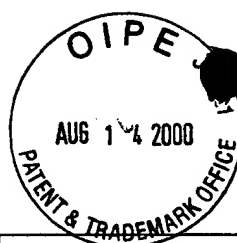
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| FORM PTO-1449 | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | APP. DOCKET NO. 2710-4007 US2 | | SERIAL NO. 09/549,937 | |
| INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) | | | | APPLICANT M.B. CHANCELLOR et al. | | | |
| | | | | FILING DATE April 14, 2000 | | GROUP ART UNIT T645-1671 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO |
| DW | 32 | WO 98/54301 | 3/12/98 | PCT-WIPO | | | |
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| | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | | |
| DW | 33 | J. Huard et al., 1994, "High efficiency of muscle regeneration after human myoblast clone transplantation in SCID mice", Journal of Clinical Investigation, 93:586-599. | | | | | |
| | 34 | J. Huard et al., 1994, "Human myoblast transplantation in immunodeficient and immunosuppressed mice: evidence of rejection", Muscle and Nerve 17:224-234. | | | | | |
| | 35 | J. Huard et al., 1995, "The route of administration is a major determinant of the transduction efficiency of rat tissues by adenoviral recombinants", Gene Therapy, 2:107-115. | | | | | |
| | 36 | M. Reza Dana et al., "Interleukin-1 Receptor Antagonist Suppresses Langerhans Cell Activity and Promotes Ocular Immune Privilege", Investigative Ophthalmology & Visual Science, 1998, 39:70-77. | | | | | |
| DW | 37 | G. Ferrari et al., "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors", Science, 1998, 279:1528-1530. | | | | | |
| EXAMINER B2 HB | | | | DATE CONSIDERED 4/18/02 | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |



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| INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) | | | | APPLICANT M.B. CHANCELLOR et al. | | | | |
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| U.S. PATENT DOCUMENTS | | | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | | |
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| | | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | | | |
| BW | | 38 | E. Barr and J. Leiden, "Systemic Delivery of Recombinant Proteins by Genetically Modified Myoblasts", <u>Science</u> , 1991, 254:1507-1509. | | | | | |
| | | 39 | T. Katagiri et al., "Bone Morphogenetic Protein-2 Converts the Differentiation Pathway of C2C12 Myoblasts into the Osteoblast Lineage", <u>J. Cell Biology</u> , 1994, 127:1755-1766. | | | | | |
| | | 40 | T.A. Rando and H. Blau, "Primary Mouse Myoblast Purification, Characterization, and Transplantation for Cell-mediated Gene Therapy", <u>J. Cell Biology</u> , 1994, 125:1275-1287. | | | | | |
| | | 41 | T. Yokoyama et al., "Gene Therapy as a Potential Treatment for BPH; Injection of Myoblast-Adenovirus Transfected with Human Inducible Nitric Oxide Synthase (iNOS) into the Proximal Urethra", <u>J. Urology</u> , 1999, 161 (4) Supplement:305 (Abstract 1175). | | | | | |
| | | 42 | J. Huard et al., "Myoblast Injection into the Bladder Wall: A Possible Method of Modulating Detrusor Contractility and Cell-Mediated Gene Therapy for Bladder Dysfunction", <u>J. Urology</u> , 1998, 159 (5) Supplement:16 (Abstract 62). | | | | | |
| PL | | 43 | J. Huard et al., "Nitric Oxide Synthase (NOS) Gene Therapy for Erectile Dysfunction; Comparison Between Plasmid, Adenovirus and Adenovirus Transduced Myoblast Vectors", <u>J. Urology</u> , 1998, 159:90 (Abstract 342). | | | | | |
| EXAMINER <i>Pradall</i> | | | | DATE CONSIDERED 11/8/02 | | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | | |



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| U.S. PATENT DOCUMENTS | | | | | | | |
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| | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | | |
| BW | | 44 | K.A. Jackson et al., 1999, "Hematopoietic potential of stem cells isolated from murine skeletal muscle", PNAS, Vol. 96, 25:14482-14486. | | | | |
| | | 45 | E. Gussoni et al., 1999, "Dystrophin expression in the <i>mdx</i> mouse restored by stem cell transplantation", Nature, 401:390-394. | | | | |
| | | 46 | Z. Qu et al., 1998, "Development of Approaches to Improve Cell Survival in Myoblast Transfer Therapy", The Journal of Cell Biology, Vol. 142, 5:1257-1267. | | | | |
| | | 47 | D.S. Musgrave et al., 1998, "Muscle-based tissue engineering for the musculoskeletal system", Gene Therapy & Molecular Biology, Vol. 3:1-15. | | | | |
| | | 48 | N. Yoshida et al., 1998, "Cell heterogeneity upon myogenic differentiation: down-regulation of MyoD and Myf-5 generates 'reserve cells'", Journal of Cell Science, 111:769-779. | | | | |
| B2 | | 49 | J.R. Beauchamp et al., 1999, "Dynamics of Myoblast Transplantation Reveal a Discrete Minority of Precursors with Stem Cell-like Properties as the Myogenic Source", The Journal of Cell Biology, Vol. 144, 6:1113-1121. | | | | |
| EXAMINER Ba211 | | | | DATE CONSIDERED 5/1/02 | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |



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| U.S. PATENT DOCUMENTS | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
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| | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.) | | | | | | |
| BW | 50 | P. Seale et al., 2000, "A New Look at the Origin, Function, and 'Stem Cell' Status of Muscle Satellite Cells", Developmental Biology, 218: 115-124. | | | | |
| | 51 | J.G. Gross et al., 1999, "Muscle Precursor Cells Injected Into Irradiated mdx Mouse Muscle persist After Serial Injury", Muscle & Nerve, 22:174-185. | | | | |
| | 52 | T.D. Alden et al., 1999, "In Vivo Endochondral Bone Formation Using a Bone Morphogenetic Protein 2 Adenoviral Vector", Human Gene Therapy, 10:2245-2253. | | | | |
| | 53 | A. Baroffio et al., 1996, "Identification of self-renewing myoblasts in the progeny of single human muscle satellite cells", Differentiation, 60:47-57. | | | | |
| | 54 | Abstract: V. Nurcombe et al., 1985, "Motoneuron Survival and Neuritic Outgrowth Promoted by Different Cell Types in Embryonic Muscle", Developmental Brain Research, 21:49-60. Abstract only | | | | |
| B2 | 55 | C. Richler et al., 1970, "The in Vitro Cultivation and Differentiation Capacities of Myogenic Cell Lines", Developmental Biology, 23:1-22. | | | | |
| EXAMINER Brian A. Hester | | | DATE CONSIDERED 5/18/02 | | | |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | |